Appl. No. 10/701,879

Amdt. Dated: October 4, 2006

Reply to Office Action of July 20, 2006

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS

- 1. (Currently Amended) A process for producing a temperature sensitive natural filler-reinforced
 thermoplastic polymer composition as an article which comprises:
- (a) extrusion melt-forming through a die in a first extruder a mixture of a high melting temperature thermoplastic polymer with a first melting temperature with a metal salt, wherein the salt is present in an amount between about 2.5 and 5 percent by weight of the polymer which reduces the melting temperature of the mixture to a second lower melting temperature to form first strands;
- (b) pelletizing the first strands to form second pellets; and
- (c) extruding a mixture of a temperature sensitive natural filler and the second pellets in a second extruder, at the second lower melting temperature or less of less than 200°C without degrading the natural

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filler to form second strands of the <u>natural</u> fillerreinforced thermoplastic polymer composition, <u>wherein</u>
without the <u>metal</u> salt, the extrusion with the
temperature sensitive filler degrades the temperature
sensitive natural filler.

- 2. (Original) The process of Claim 1 wherein the filler is a cellulose.
- 3. (Original) The process of Claim 1 wherein the filler is a cellulosic fiber.
- 4. (Original) The process of Claim 1, 2, or 3 wherein the thermoplastic polymer is selected from the group consisting of nylon, polyethylene terephthalate (PET), polybutylene terephthalate (PBT), polytrimethylterephthalate (PTT), ethylene (ECM), propylene oxide (PPO), polystyrene monoxide copolymer blends, polyacetals, cellulose butyrate, acrylonitrile-butadiene-styrene (ABS), methyl methacrylates, polychlorotrifluoroethylene polymers, and mixtures thereof.

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5. (Original) The process of Claim 1, 2, or 3 wherein the metal in the metal salt forms a reaction product with the polymer in the melt.

6. (Original) The process of Claim 1, 2, or 3 wherein the metal salt is a metal halide.

7. (Original) The process of Claim 1 wherein the thermoplastic polymer composition is molded into a shape.

Claim 8 (Cancelled)

9. (Currently Amended) The process of Claim 1 wherein the filler further <u>includes</u> comprises a glass or \underline{a} high melting temperature polymer fiber.

10. (Currently Amended) A process for producing an article from a <u>temperature sensitive natural</u> <u>fiber-fibers-reinforced</u> thermoplastic polymer composition which comprises:

(a) extrusion melt-forming through a die in a first extruder a mixture of a high melting temperature

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thermoplastic polymer with a first melting temperature with at least one metal salt selected <u>form from</u> the group consisting of lithium chloride, lithium bromide, lithium iodide, copper chloride, zinc chloride, aluminum chloride, gallium chloride, and mixtures thereof wherein the salt reduces the melting point of the mixture to a second lower melting temperature to form first strands;

- (b) pelletizing the first strands from second
 pellets;
- (c) extruding a mixture of one or more temperature sensitive natural fibers and the second pellets in a second extruder, at the second lower melting point or less temperature of less than 200°C without degrading the natural fibers to form second strands of the temperature sensitive natural fibers—fiber—reinforced thermoplastic polymer composition; and
- (d) melt-forming an article from the second strands, wherein the extruding and melt forming without the metal salt degrades the temperature sensitive natural fibers.

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11. (Original) The process of Claim 10 wherein the fibers are selected from the group consisting of hemp, flax, kenaf, jute, sisal, pineapple leaf fiber, coir, henequen, pure cellulose in its various forms, corn, cotton, and mixtures thereof.

- 12. (Currently Amended) The process of Claim 10 wherein the <u>fiber-</u> <u>fibers-</u>reinforced composition further includes a maleated compatibilizer and one or more toughening agents selected from the group consisting of rubber, modified rubber, maleated rubber, epoxidized rubber, vegetable oil-based plasticizer, and mixtures thereof.
- 13. (Original) The process of Claim 10, 11, or 12 wherein the thermoplastic polymer is selected from the group consisting of nylon, polyethylene terephthalate (PET), terephthalate polybutylene (PBT), polytrimethylterephthalate (PTT), ethylene carbon (ECM), propylene oxide (PPO), polystyrene monoxide copolymer blends, polyacetals, cellulose butyrate, acrylonitrile-butadiene-styrene (ABS), methyl methacrylates, polychlorotrifluoroethylene polymers, and

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mixtures thereof.

14. (Original) The process of Claim 10, 11, or 12 wherein the metal in the metal salt forms a reaction product with the thermoplastic polymer in the melt.

15. (Currently Amended) The process of Claim 10 wherein the <u>fiber-</u> <u>fibers-</u>reinforced thermoplastic polymer composition is molded into a shape.

Claim 16 (Cancelled)

17. (Currently Amended) The process of Claim 10 wherein a glass or \underline{a} high melting temperature polymer fiber is introduced with the fibers in step (c).

18. (Currently Amended) A process for producing a temperature sensitive natural filler-reinforced thermoplastic polymer composition as an article which comprises:

(a) extrusion melt-forming through a die in a first extruder a mixture of a thermoplastic polymer with a melting temperature at about 200° C or above with at

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least one metal salt, wherein the salt is present in an amount between about 2.5 and 5 percent by weight of the polymer which reduces the melting temperature of the mixture to less than about 200° C to form first strands;

- (b) palletizing pelletizing the first strands to form second pellets; and
- (c) extruding a mixture of the filler and the second pellets in a second extruder, at less than 200° C without degrading the temperature sensitive natural filler to form second strands of the natural filler-reinforced thermoplastic polymer composition, wherein without the metal salt, the extrusion with the temperature sensitive filler degrades the temperature sensitive natural filler.
- 19. (Original) The process of Claim 18 wherein the thermoplastic polymer is selected from the consisting of nylon, polyethylene terephthalate (PET), terephthalate (PBT), polybutylene (PTT), polytrimethylterephthalate ethylene carbon (ECM), propylene oxide (PPO), polystyrene monoxide copolymer blends, polyacetals, cellulose butyrate, (ABS), acrylonitrile-butadiene-styrene methyl

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methacrylates, polychlorotrifluoroethylene polymers, and mixtures thereof.

20. (Original) The process of Claim 18 wherein the filler is selected from the group consisting of hemp, flax, kenaf, jute, sisal, pineapple leaf fiber, coir, henequen, pure cellulose in its various forms, corn, cotton, and mixtures thereof.

21. (Currently Amended) The process of Claim 18 wherein the metal salt is selected form from the group consisting of lithium chloride, lithium bromide, lithium iodide, copper chloride, zinc chloride, aluminum chloride, gallium chloride, and mixtures thereof.

22. (Currently Amended) The process of Claim 18 wherein the filler further includes a glass or \underline{a} high melting temperature polymer fiber.

Claims 23-29 (Cancelled)